

In The Claims:

1-230. (canceled)

231. (previously presented) An electric component comprising:
a die having a top surface at a horizontal level;
a bottommost metal layer over said horizontal level and extending to a place not over said die, wherein said bottommost metal layer is connected to said die; and
a passive device over said horizontal level.

232. (previously presented) The electric component in claim 231 further comprising a substrate joined with said die, wherein said substrate is under said horizontal level.

233. (previously presented) The electric component in claim 232, wherein said substrate comprises polymer.

234. (previously presented) The electric component in claim 232, wherein said substrate comprises resin.

235. (previously presented) The electric component in claim 232, wherein said substrate comprises imide.

236. (previously presented) The electric component in claim 232, wherein said substrate comprises plastic.

237. (previously presented) The electric component in claim 232, wherein said substrate comprises thermosetting plastic.

238. (previously presented) The electric component in claim 232, wherein said substrate comprises metal.

239. (previously presented) The electric component in claim 232, wherein said substrate is formed using a process comprising pressing.

240. (previously presented) The electric component in claim 232, wherein said substrate is formed using a process comprising injection molding.

241-242. (canceled)

243. (currently amended) The electric component in claim 231 further comprising an insulating layer between said bottommost metal layer and said horizontal level.

244. (currently amended) The electric component in claim 243, wherein said insulating layer comprises polyimide (PI).

245. (currently amended) The electric component in claim 243, wherein said insulating layer comprises benzocyclobutene (BCB).

246. (currently amended) The electric component in claim 243, wherein said insulating layer comprises a porous structure.

247. (currently amended) The electric component in claim 231 further comprising an insulating layer over said bottommost metal layer.

248. (currently amended) The electric component in claim 247, wherein said insulating layer comprises polyimide (PI).

249. (currently amended) The electric component in claim 247, wherein said insulating layer comprises benzocyclobutene (BCB).

250. (currently amended) The electric component in claim 247, wherein said insulating layer comprises a porous structure.

251. (currently amended) The electric component in claim 231 further comprising an insulating layer between said passive device and said horizontal level.

252. (currently amended) The electric component in claim 251, wherein said insulating layer comprises polyimide (PI).

253. (currently amended) The electric component in claim 251, wherein said insulating layer comprises benzocyclobutene (BCB).

254. (currently amended) The electric component in claim 251, wherein said insulating layer comprises a porous structure.

255. (currently amended) The electric component in claim 231 further comprising an insulating layer over said passive device.

256. (currently amended) The electric component in claim 255, wherein said insulating layer comprises polyimide (PI).

257. (currently amended) The electric component in claim 255, wherein said insulating layer comprises benzocyclobutene (BCB).

258. (currently amended) The electric component in claim 255, wherein said insulating layer comprises a porous structure.

259. (previously presented) The electric component in claim 231, wherein said top surface comprises multiple pads.

260. (previously presented) The electric component in claim 231, wherein said bottommost metal layer comprises a portion connecting multiple internal circuits of said die.

261. (previously presented) The electric component in claim 260, wherein said die portion is used to transmit a signal.

262. (previously presented) The electric component in claim 260, wherein said die portion is used to provide a power voltage.

263. (previously presented) The electric component in claim 260, wherein said die portion is used to provide a ground voltage.

264. (previously presented) The electric component in claim 231 further comprising an additional die, said bottommost metal layer being over said additional die, wherein said bottommost metal layer comprises a portion connecting said die and said additional die.

265. (previously presented) The electric component in claim 231 further comprising a film layer around said die.

266. (previously presented) The electric component in claim 265, wherein said film layer comprises polymer.

267. (previously presented) The electric component in claim 265, wherein said film layer comprises epoxy.

268. (previously presented) The electric component in claim 265, wherein said film layer has a surface substantially coplanar with said top surface of said die.

269. (previously presented) The electric component in claim 231 further comprising a bump over said horizontal level, wherein said bump comprises solder.

270. (previously presented) The electric component in claim 231 further comprising a bump over said horizontal level, wherein said bump comprises gold.

271. (previously presented) The electric component in claim 231, wherein said passive device comprises a resistor.

272. (previously presented) The electric component in claim 231, wherein said passive device comprises a capacitor.

273. (previously presented) The electric component in claim 231, wherein said passive device comprises an inductor.

274. (previously presented) The electric component in claim 231, wherein said passive device comprises a filter.

275. (previously presented) The electric component in claim 231, wherein said passive device comprises a waveguide.

276. (previously presented) The electric component in claim 231, wherein said passive device comprises a micro electronic mechanical sensor (MEMS).

277. (previously presented) The electric component in claim 231, wherein there is no die under said passive device.

278. (previously presented) The electric component in claim 231, wherein said passive device is connected to a circuit trace of said bottommost metal layer.

279. (previously presented) The electric component in claim 231, wherein said passive device is connected to said die.

280. (previously presented) An electric component comprising:

a substrate comprising metal;
a die joined with said substrate, said die having a top surface at a horizontal level,
wherein said substrate is under said horizontal level; and
a passive device over said horizontal level.

281. (previously presented) The electric component in claim 280 further comprising a metal layer over said horizontal level.

282. (previously presented) The electric component in claim 281, wherein said metal layer is over said die and extends to a place not under said die.

283. (currently amended) The electric component in claim 281 further comprising an insulating layer between said die and said metal layer.

284. (currently amended) The electric component in claim 283, wherein said insulating layer comprises polyimide.

285. (currently amended) The electric component in claim 283, wherein said insulating layer comprises benzocyclobutene (BCB).

286. (currently amended) The electric component in claim 283, wherein said insulating layer comprises a porous structure.

287. (currently amended) The electric component in claim 281 further comprising an insulating layer over said metal layer.

288. (currently amended) The electric component in claim 287, wherein said insulating layer comprises polyimide.

289. (currently amended) The electric component in claim 287, wherein said insulating layer comprises benzocyclobutene (BCB).

290. (currently amended) The electric component in claim 287, wherein said insulating layer comprises a porous structure.

291. (previously presented) The electric component in claim 281, wherein said metal layer comprises a portion connecting multiple internal circuits of said die.

292. (previously presented) The electric component in claim 291, wherein said portion is used to transmit a signal.

293. (previously presented) The electric component in claim 291, wherein said portion is used to provide a ground voltage.

294. (previously presented) The electric component in claim 291, wherein said portion is used to provide a power voltage.

295. (previously presented) The electric component in claim 281 further comprising an additional die, said metal layer being over said die and said additional die, wherein said metal layer comprises a portion connecting said die and said additional die.

296. (previously presented) The electric component in claim 281, wherein said metal layer comprises a portion connecting said passive device and an internal circuit of said die.

297-298. (canceled)

299. (previously presented) The electric component in claim 280 further comprising a film layer around said die and over said substrate.

300. (previously presented) The electric component in claim 299, wherein said film layer comprises polymer.

301. (previously presented) The electric component in claim 299, wherein said film layer comprises epoxy.

302. (previously presented) The electric component in claim 299, wherein said film layer has a surface substantially coplanar with said top surface of said die.

303. (previously presented) The electric component in claim 280 further comprising a bump over said horizontal level, wherein said bump comprises solder.

304. (previously presented) The electric component in claim 280 further comprising a bump over said horizontal level, wherein said bump comprises gold.

305. (previously presented) The electric component in claim 280, wherein said passive device comprises a resistor.

306. (previously presented) The electric component in claim 280, wherein said passive device comprises a capacitor.

307. (previously presented) The electric component in claim 280, wherein said passive device comprises an inductor.

308. (previously presented) The electric component in claim 280, wherein said passive device comprises a filter.

309. (previously presented) The electric component in claim 280, wherein said passive device comprises a waveguide.

310. (previously presented) The electric component in claim 280, wherein said passive device comprises a micro electronic mechanical sensor (MEMS).

311. (previously presented) The electric component in claim 280, wherein said passive device comprises a portion not over said die.

312. (currently amended) The electric component in claim 280 further comprising an insulating layer between said passive device and said horizontal level.

313. (currently amended) The electric component in claim 312, wherein said insulating layer comprises polyimide (PI).

314. (currently amended) The electric component in claim 312, wherein said insulating layer comprises benzocyclobutene (BCB).

315. (currently amended) The electric component in claim 312, wherein said insulating layer comprises a porous structure.

316. (currently amended) The electric component in claim 280 further comprising an insulating layer over said passive device.

317. (currently amended) The electric component in claim 316, wherein said insulating layer comprises polyimide (PI).

318. (currently amended) The electric component in claim 316, wherein said insulating layer comprises benzocyclobutene (BCB).

319. (currently amended) The electric component in claim 316, wherein said insulating layer comprises a porous structure.